Supplemental Specification 2005 Standard Specification Book

SECTION 13555M

ATMS CABINET

Delete Article 1.2 and replace with the following:

1.2 RELATED SECTIONS

- A. Section 02892: Traffic Signal
- B. Section 03055: Portland Cement Concrete
- C. Section 03152: Concrete Joint Control
- D. Section 03211: Reinforcing Steel and Welded Wire.
- E. Section 03310: Structural Concrete
- F. Section 13551: General ATMS Requirements
- G. Section 13553: ATMS Conduit
- H. Section 13554: Polymer Concrete Junction Box
- I. Section 13561: ATMS Power Service

Add Article 1.3 paragraph E:

E. National Electrical Code (NEC)

Delete Article 2.1 paragraph A and replace with the following:

A. Concrete: AA(AE) required. Refer to Section 03055.

Delete Article 2.2 paragraph B and replace with the following:

- B. Provide commercially available framing strut to attach transformers, breaker enclosures, disconnects, or other electrical equipment (Refer to AT Series Standard Drawings).
 - 1. 12-gauge, U-shaped stainless steel channel with ⁵/₈-inch diameter pre-drilled holes.
 - 2. Cross-section dimensions: $1^{5}/_{8}$ inch x $1^{5}/_{8}$ inch minimum.

Add Article 2.4 paragraph B:

B. Minimum spacing from any edge of junction box to any edge of concrete collar must be 10 inches.

Delete Article 2.7 and replace with the following:

2.7 EXPANSION JOINT MATERIAL

A. Preformed expansion joint filler. Refer to AT Series Standard Drawings and Section 03152.

Delete Article 3.1 paragraph C and replace with the following:

C. Restore area to the original condition after construction is completed.

Delete Article 3.1 paragraph D

Delete Article 3.2 and replace with the following:

3.2 CONSTRUCT CABINET FOUNDATION

- A. Reinforcing Steel and Welded Wire. Refer to Section 03211.
- B. Verify bolt pattern, conduit runs, and foundation dimensions before foundation construction.
 - 1. Install anchor bolts to accommodate conduit runs.
 - 2. Embed strut anchor bolts a minimum of 6 inches into foundation.
 - 3. Embed cabinet anchor bolts a minimum of 6 inches into foundation.
- C. Concrete: Refer to Section 03055.

- D. Do not weld reinforcing steel, conduit, or anchor bolts.
 - 1. Use tie wire to secure conduits.
 - 2. Use template to align and secure anchor bolts.
 - 3. Locate steel, conduit, or anchor bolts a minimum of 3 inches from concrete surface.
- E. Place the concrete directly into the excavation. Use minimum forming above ground.
- F. Provide minimum setback between foundation and all walls, guardrails, poles, and other above ground features as per Section 13551.
- G. Extend conduit 2 inches above the floor of the cabinet foundation.

H. Conduit:

- 1. Install all conduit in base of cabinet within a 12-inch x 18-inch rectangle centered in the cabinet base.
- 2. Refer to the contract for the number, size, and orientation of all conduits entering the junction boxes.
- 3. Refer to AT Series Standard Drawings for number and type of conduit used between the cabinet and adjacent junction boxes.
- 4. Above ground, use galvanized rigid steel; underground, use PVC.
- 5. Install bushings on the ends of all conduit before cable installation.
- 6. Provide 1 inch minimum spacing between each conduit in cabinet base. Cap conduit at both ends until used.
- I. Place the cabinet foundation parallel to the roadway.
- J. Cabinet foundation surfaces:
 - 1. Ordinary Surface Finish per Section 03110
 - 2. Chamfer around top surface perimeter
 - 3. Level top surface before cabinet installation
- K. Place preformed expansion joint filler at concrete joints.

Delete Article 3.3 paragraph E and replace with the following:

E. Caulk between base of cabinet and top of foundation to form a watertight seal.

Add Article 3.3 paragraph F:

F. Orient cabinet on foundation with the vented door downstream of traffic.

Delete Article 3.4 and replace with the following:

3.4 INSTALL DISCONNECT, TRANSFORMER, OR BOTH

- A. Install either a supplemental disconnect as described on AT Series Standard Drawings, or an approved underground service pedestal as described in the SL Series Standard Drawings and in Section 13561 unless otherwise specified.
- B. Install disconnect or underground service pedestal between 10 and 15 feet from the cabinet, away from roadway. Field locate with the Engineer.
- C. Ground disconnect on ground rod located in Type I junction box at the cabinet base.
- D. Ground the transformer to the control cabinet ground terminal.
- E. Install disconnect and transformer in accordance with AT Series Standard Drawings, SL Series Standard Drawings, and the NEC.

Delete Article 3.6 paragraphs A and B and replace with the following:

A. Refer to Section 13561 for Power Service.